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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,185

08/19/2008

Yasushi Sugimoto

MIYOSH0007

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24203 7590 01/31/2011

GRIFFIN & SZIPL, PC

SUITE PH-1

2300 NINTH STREET, SOUTH

ARLINGTON, VA 22204

EXAMINER

DAVIS, TONY O

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/597,185	Applicant(s) SUGIMOTO ET AL.	
	Examiner TONY DAVIS	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/14/06, 10/8/08, 3/2/10, 7/22/10</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The references cited in the IDS have been considered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-8 are rejected under 35 U.S.C. 103(a)** as being unpatentable over **Katsu et al. (US 2002/0154087)**, hereinafter referred to as Katsu, in view of **Boyd et al. (US 2002/0145593)**, hereinafter referred to as Boyd.

Regarding claim 1, Katsu teaches A reflector (reflection sheet 206 of fig 2) comprising a structured face (light guide plate 205 of fig 2-3 and/or prism sheet 204 of fig 2-3)) that includes an iteration of prism elements (prism structural elements of fig 3) of triangular section (paragraph 35, 37, 29, and 34, fig 2-3). However, Katsu fails to teach prism elements of trapezoidal section.

In a similar field of endeavor, Boyd discloses frontlit illuminated touch panel. **In particular, Boyd teaches** prism elements of trapezoidal section (paragraph 40).

Katsu teaches the claimed invention except prism elements of trapezoidal section. Boyd teaches that it's well known to one of ordinary skill in the art at the time of the invention prism elements of trapezoidal section.

Therefore, it would've been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Katsu by incorporating the teachings of Boyd for the purpose of increased uniform illumination of backlight.

Regarding claim 2, Boyd teaches the reflector according to claim 1 wherein the height of the section of the prism elements is constant (paragraph 40).

Therefore, it would've been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Katsu by incorporating the teachings of Boyd for the purpose of increased uniform illumination of backlight.

Regarding claim 3, Boyd teaches the reflector according to claim 1 wherein the height of the section of the prism elements is decreasing progressively (paragraph 40).

Therefore, it would've been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Katsu by incorporating the teachings of Boyd for the purpose of increased uniform illumination of backlight.

Regarding claim 4, Katsu teaches A backlight device (200 of fig 2) comprising: a light guide plate (205 of fig 2-3) that propagates, reflects and diffuses light, disposed at the rear surface side of a display device (paragraph 29-30, fig 2-3); a light source (cold cathode tube 209 of fig 2-3) disposed at least one end of the light guide plate (paragraph 34, fig 2-3); and a reflector (reflection sheet 206 of fig 2-3) that reflects light from the light guide plate, disposed at the lower phase of the light guide plate

(paragraph 29 and 34, fig 2-3); wherein the reflector is the reflector according to claim 1 (paragraph 35, 37, 29, and 34, fig 2-3).

Regarding claim 5, Katsu teaches The backlight device according to claim 4 using a light guide plate having reflective elements integrally formed on the surface adjacent to a liquid crystal display device, that emits light rays by means of these reflective elements in the direction of a reflector adjacent to that face of the light guide plate opposing the side of the light guide plate nearest to the liquid crystal display device (paragraph 29-30 and 34, fig 2-3).

Regarding claim 6, Katsu teaches the backlight device according to claim 5 wherein an anisotropic diffusion pattern is formed on the surface of the light guide plate opposing the surface on which the reflective elements are integrally formed (paragraph 29-30 and 34-35, fig 2-3).

Regarding claim 7, it is rejected for the same rationale as the rejection of claim 4.

Regarding claim 8, it is rejected for the same rationale as the rejection of claim 4.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Umemeoto et al. (US 2002/0180711) discloses Touch panel including illuminator and reflective liquid-crystal display device. Tong et al. (US 2006/0007098) discloses Mixed monochrome and colour display driving technique.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TONY DAVIS whose telephone number is (571)270-5586. The examiner can normally be reached on M-Th 7:30 a.m.-6 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quan-Zhen Wang can be reached on 571-272-3114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. D./
Examiner, Art Unit 2629

/Quan-Zhen Wang/
Supervisory Patent Examiner, Art Unit 2629